

ABSTRACT OF THE DISCLOSURE

A fin field effect transistor includes a fin, a source region, a drain region, a first gate electrode and a second gate electrode. The fin includes a channel. The source region is formed adjacent a first end of the fin and the drain region is formed adjacent a second end of the fin. The first gate electrode includes a first layer of metal material formed adjacent the fin. The second gate electrode includes a second layer of metal material formed adjacent the first layer. The first layer of metal material has a different work function than the second layer of metal material. The second layer of metal material selectively diffuses into the first layer of metal material via metal interdiffusion.